

Supplemental Amendment dated April 17, 2008

Reply to the January 17, 2008 Office Action and in supplement to the April 16, 2008 Amendment

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. – 20. (Cancelled).

21. (Currently Amended) A washing machine, comprising:

a cabinet;

a drum rotatably installed in the cabinet;

a motor configured to rotate the drum; and

a brake resistance assembly that receives and dissipates electric energy generated when the motor is turned off, the assembly comprising:

a case that defines an interior space;

first and second terminals at least partially housed within the interior space defined by the case, wherein the first and second terminals are coupled to winding coils of the motor via a motor drive circuit; and

first and second resistance coils mounted within the case and coupled to the first and second terminals, wherein the first and second resistance coils receive electric energy generated by continued rotation of the motor due to inertia after the motor is turned off and convert the received electric energy into thermal energy, wherein a resistance of the first coil is

Serial No. **10/721,180**

Docket No. **K-0585**

Supplemental Amendment dated April 17, 2008

Reply to the January 17, 2008 Office Action and in supplement to the April 16, 2008 Amendment

greater than a resistance of the second coil such that the first coil will be physically damaged and will cause ~~a short~~an open circuit so as to prevent damage to the motor drive circuit when electric energy that passes through the second coil and that is applied to the first coil exceeds a predetermined level.

22. (Previously Presented) The washing machine of claim 21, wherein first ends of the first and second coils are coupled to the first and second terminals, respectively, and wherein second ends of the first and second coils are each coupled to a common terminal.

23. (Previously Presented) The washing machine as claimed in claim 22, wherein the second coil is configured to receive a voltage from the second terminal resulting from an electromotive force generated by the motor, to convert the voltage received from the second terminal into thermal energy so as to decrease the voltage, and to transfer the decreased voltage to the first coil via the common terminal.

24. (Previously Presented) The washing machine as claimed in claim 23, wherein the first coil is configured to receive the decreased voltage from the second coil, and to convert the decreased voltage to thermal energy so as to substantially eliminate the voltage.

25. (Cancelled)

Serial No. **10/721,180**

Docket No. **K-0585**

Supplemental Amendment dated April 17, 2008

Reply to the January 17, 2008 Office Action and in supplement to the April 16, 2008 Amendment

26. (Previously Presented) The washing machine as claimed in claim 23, wherein a portion of the first coil melts when the decreased voltage received from the second coil exceeds a predetermined level so as to prevent transfer of the voltage to the drive circuit via the first terminal.

27 - 28. (Cancelled)

29. (Previously Presented) The washing machine as claimed in claim 26, wherein the first coil is thinner than the second coil.

30. (Cancelled)

31. (Previously Presented) The washing machine as claimed in claim 26, wherein the first coil is made of Aluminum and the second coil is made of Copper.

32. (Previously Presented) The washing machine as claimed in claim 21, wherein an exterior surface of the case is contoured so as to increase a heat-exchange area thereof.

33. (Previously Presented) The washing machine as claimed in claim 21, wherein the case comprises:

Serial No. **10/721,180**

Docket No. **K-0585**

Supplemental Amendment dated April 17, 2008

Reply to the January 17, 2008 Office Action and in supplement to the April 16, 2008 Amendment

a first partition provided in the interior space and configured to receive the first and second terminals; and

a second partition provided in the interior space at a predetermined distance from the first partition.

34. (Previously Presented) The washing machine as claimed in claim 33, wherein a common terminal is mounted on the second partition, wherein the first and second coils extend between the first and second partitions, wherein first ends of the first and second coils are coupled to the first and second terminals, respectively, and wherein second ends of the first and second coils are coupled to the common terminal.

35. (Previously Presented) The washing machine as claimed in claim 33, wherein an insulator having good thermal conductivity is filled in a space formed between the first and second partitions.

36. (Previously Presented) The washing machine as claimed in claim 35, wherein a molding material is provided at outer sides of the first and second partitions opposite the insulator.

Supplemental Amendment dated April 17, 2008

Reply to the January 17, 2008 Office Action and in supplement to the April 16, 2008 Amendment

37. (Currently Amended) A brake resistance assembly for a washing machine, wherein the brake resistance assembly is configured to dissipate electric energy generated when a motor is turned off, the assembly comprising:

a case that defines an interior space;

first and second terminals at least partially housed within the interior space defined by the case, wherein the first and second terminals are coupled to winding coils of the motor by a motor drive circuit; and

first and second resistance coils mounted in the interior space and coupled to the first and second terminals, wherein the first and second resistance coils receive electric energy generated by continued rotation of the motor due to inertia after the motor is turned off and convert the received electric energy into thermal energy, and wherein a resistance of the first coil is greater than a resistance of the second coil such that the first coil will be physically damaged and will cause ~~a short~~an open circuit so as to prevent damage to the motor drive circuit when electric energy that passes through the second coil and that is applied to the first coil exceeds a predetermined level.

38 - 39. (Cancelled)

40. (Previously Presented) The brake resistance assembly as claimed in claim 37, wherein the first coil is thinner than the second coil.

Supplemental Amendment dated April 17, 2008

Reply to the January 17, 2008 Office Action and in supplement to the April 16, 2008 Amendment

41. (Cancelled)

42. (Previously Presented) The brake resistance assembly as claimed in claim 37, wherein the first coil is made of Aluminum and the second coil is made of Copper.

43. (Previously Presented) The brake resistance assembly as claimed in claim 51, wherein first ends of the first and second coils are coupled to the first and second terminals, and wherein second ends of the first and second coils are coupled to a common terminal.

44. (Previously Presented) The brake resistance assembly as claimed in claim 43, wherein the second coil is configured to receive a voltage from the second terminal, to convert the voltage received from the second terminal into thermal energy so as to decrease the voltage, and to transfer the decreased voltage to the first coil via the common terminal.

45. (Previously Presented) The brake resistance assembly as claimed in claim 44, wherein the first coil is configured to receive the decreased voltage from the second coil, and to convert at least a portion of the decreased voltage to thermal energy.

46. (Previously Presented) The brake resistance assembly as claimed in claim 45, wherein the first coil melts when the voltage it receives from the second coil exceeds a

Serial No. **10/721,180**

Docket No. **K-0585**

Supplemental Amendment dated April 17, 2008

Reply to the January 17, 2008 Office Action and in supplement to the April 16, 2008 Amendment

predetermined level so as to prevent transfer of the voltage to the drive circuit via the first terminal.

47. (Previously Presented) The brake resistance assembly as claimed in claim 51, wherein an exterior surface of the case is contoured so as to increase a heat-exchange area thereof.

48. (Previously Presented) The brake resistance assembly as claimed in claim 47, wherein the contoured portion comprises channels extending longitudinally along an exterior surface of the case.

49. (Previously Presented) The brake resistance assembly as claimed in claim 51, wherein an insulator having good thermal conductivity is filled in a space formed between the first and second partitions, and wherein a molding material is provided at outer sides of the first and second partitions opposite the insulator.

50. (Previously Presented) The brake resistance assembly as claimed in claim 37, wherein the case comprises:

a first partition provided in the interior space; and

Serial No. **10/721,180**

Docket No. **K-0585**

Supplemental Amendment dated April 17, 2008

Reply to the January 17, 2008 Office Action and in supplement to the April 16, 2008 Amendment

a second partition provided in the interior space at a predetermined distance from the first partition.

51. (Previously Presented) The brake resistance assembly as claimed in claim 50, wherein the first and second terminals are mounted on the first partition, and the first and second coils are coupled to the first and second terminals.